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BARZEBO

Background of the Invention

1. Field of the Invention:

[0001] This disclosure relates to portable pavilions or gazebos, and more specifically to portable pavilions or gazebos having integral service components.

2. Description of the Prior Art:

[0002] Conventional gazebos or pavilions are often used to provide shade and or shelter for outdoor functions.

[0003] What is needed is gazebo or pavilion integrating one or more service components such as a service counter or bar to improve the structural integrity and optimize guest benefits from the gazebo or pavilion.

Summary of the Invention

[0004] A Barzebo according to the present disclosure is a portable shelter, gazebo or pavilion having an integrated service bar joining two or more adjacent support panels. A Barzebo according to the present disclosure is configured with the server area of the service bar and the patron area of the service bar within the envelope of the shelter and the patron area of the service bar is congruent with the optimal benefit area of the shelter. Having the service bar integrated with the shelter structure improves the structural stability of the shelter along two axes.

[0005] In a first aspect, a barzebo according to the present

disclosure provides eight or more support panels integrated into four or more support columns. The counter service unit is integrated between two adjacent support columns to provide increased structural stability.

[0006] In another aspect, a barzebo according to the present disclosure includes an integrated counter service unit that includes the server area and the patron area within the barzebo envelope and some or all of the patron area is congruent with the optimal benefit area of the barzebo.

[0007] In still another aspect, the present disclosure may include one or more column counters to provide increased utility and integrated structural strength.

[0008] In a further aspect, the present disclosure may include a portable shelter such as a gazebo or pavilion having a plurality of corner supports, each corner support having a top end and a bottom end and two or more legs connecting the top end and the bottom end, and a roof structure having a plurality of base corners, each base corner engaging the top end of one of the plurality of corner supports, the combination of the roof structure and the corner supports forming a gazebo envelope and defining an optimal benefit area within the gazebo envelope, and a service unit having a service area and a patron area, the service unit integrated between two adjacent corner supports, the service area and the patron area of the integrated service unit are within the gazebo envelope, and some or all of the patron area is congruent with the optimal benefit area.

[0009] These and other features and advantages of this invention will become further apparent from the detailed description and accompanying figures that follow. In the figures and description, numerals indicate the various features of the invention, like numerals referring to like features throughout both the drawings and the description.

Brief Description of the Drawings

Fig. 1 is a front elevation view of a Barzebo according to the present disclosure.

Fig. 2 is a plan view of the barzebo of Fig. 1.

Fig. 3A is a rear elevation view of a barzebo according to the present disclosure.

Fig. 3B is a detail view of an alternate embodiment for surface attachments for a barzebo according to the present disclosure.

Fig. 4 is a side view of a barzebo according to the present disclosure

Fig. 5 is a perspective view of a barzebo according to the present disclosure.

Fig. 6 is a front view of a support panel according to the present invention.

Fig. 7 is a perspective view of a support column according to the present invention.

Fig. 8 is a plan view of an alternate embodiment barzebo according to the present disclosure.

Fig. 9 is a perspective view of the barzebo of Fig. 8.

Fig. 10 is a plan view of another alternate embodiment barzebo according to the present disclosure.

Fig. 11 is a plan view of still another alternate embodiment barzebo according to the present disclosure.

Fig. 12 is a plan view of a further alternate embodiment barzebo according to the present disclosure.

Detailed Description of the Preferred Embodiment(s)

[0010] Referring now to Fig. 1, Barzebo 10 includes 4 or more support panels such as support panel 12, a roof structure such as roof structure 14 covered by canopy 16, and a service unit such as service unit 18. In a currently preferred embodiment of the present invention, roof structure 14 also included apex vent 20 and overhang 23 with extension distance 23'. Apex vent 20 may be shielded with vent canopy 22 to prevent precipitation incursion. Overhang extension distance 23' may be any suitable length.

[0011] Referring now to Fig. 2, in a plan view of Barzebo 10, independent corners 24 and 24' each include two support panels 12 connected or joined to form support columns 26 and 28 respectively. Service unit 18 is connected or joined to support panels 30 in bar corners 32 and 34. Two or more support panels 30 may be connected or joined together to form service unit support columns 36 and 38 in corners 32 and 34 respectively. Within the horizontal plane of Fig. 2, service unit support columns 36 and 38 in corners 32 and 34 respectively and support columns 26 and 28 in corners 24 and 24' respectively form barzebo envelope 40. Barzebo envelope 40 extends vertically from the ground to roof structure 14, enclosing Barzebo volume 42. Optimal benefit area 44 is a 3-dimensional space formed within Barzebo envelope 40, and is generally equidistant from barzebo envelope 40. Distance 46 separating optimal benefit area 44 from barzebo envelope 40 is a function of the latitude at which Barzebo 10 is located and the general climate of the location. One of the benefits of Barzebo 10 is shade from solar radiation and as the latitude of the location of Barzebo 10 increases, distance 46 will increase.

[0012] Service unit 18 includes server area 18S and patron area 18P. Patron area 18P is adjacent service unit side 48. In Barzebo 10 according to the present disclosure patron area 18P and optimal benefit area 44 have an area of congruence identified in

Fig. 2 as barzebo area 50.

[0013] Server area 18S is enclosed by service unit side 52, service unit side 54, service unit side 56 and barzebo envelope 40. Having server area 18S within barzebo envelope 40 permits someone working in server area 18S to be shielded from solar radiation and precipitation by using a plastic sheet, a shield, a tarp or other suitable material such as server shield 60 extending from the ground to roof structure 14 along barzebo service side 58.

[0014] Referring now to Fig. 3, in a currently preferred embodiment of the present invention apex vent 20 is formed by vent opening 60 through canopy 16. Apex vent structure 62 is attached to roof structure 14 to provide support and shape to vent canopy 22, as well as vent separation 64.

[0015] Service unit 18 includes counter 65 and may also include one or more additional shelves such as shelves 66 and 68. Counter 65 and shelves 66 and 68 may be wood, metal, glass or any other suitable material, and they may be solid or they may be formed of any other suitable material such as metal mesh thus forming self-cleaning or self-drying shelves. Shelves 66 and 68 may be accessed from server area 18S through service unit side 52, service unit side 54, or service unit side 56 which are not closed. Service sides 70, 72, 74, 48, 52, 54, and 56 may be closed or shielded using any suitable material such as but not limited to wood, metal, or glass. In a currently preferred embodiment of the present invention, service sides 70, 72, 74, 48, 52, 54, and 56 are covered using canvas or any other suitable material such as fabric 76 laced or tied to service unit 18 using lacing 78 tied through holes 79. In another embodiment of the present disclosure, service sides 70, 72, 74, 48, 52, 54, and 56 may be covered using canvas or any other suitable material such as fabric 76 laced or tied to service unit 18 using lacing 78 tied through hooks such as hooks 77. Hooks 77 may be of any suitable

shape and or size.

[0016] Referring now to Fig. 3 and Fig. 4, service unit 18 is an integral structural element of Barzebo 10. Service unit 18 supports service unit support columns 36 and 38 at bar corners 32 and 34 respectively. Support panels 30 are attached to service unit 18 at attachment points such as attachment point 80. Service unit legs 82, 82', 83 and 83' extend from the ground to roof structure 14. Integration of service unit 18 with service unit support columns 36 and 38 extends the lateral support along axis X at bar corners 32 and 34 from length 84 of a standard support panel 12 to length 86. Integration of service unit 18 with service unit support columns 36 and 38 extends the lateral support along axis Y at bar corners 32 and 34 from length 85 of a standard support panel 12 to length 87.

[0017] In another embodiment of the present disclosure, lateral support truss 88 may be connected or otherwise attached between adjacent support columns such as service unit support column 36 and support column 26. Lateral support truss 88 may include one or more truss web elements such as web element 90. Web elements may adopt any decorative shapes.

[0018] Support panel 12 may have feet such as feet 12F or it may include a bottom bar 92 as shown in Fig. 5.

[0019] Referring now to Fig 5, roof structure 14 is generally pyramidal with base corners 15, 17, 19, and 21 engaging service unit support column 36, support column 26, support column 28, and service unit support column 38 respectively. In other embodiments of the present disclosure, base corners such as 15, 17, 19, and 21 may be supported by one, two or more support panels that may or may not be joined or otherwise connected to form support columns. Roof structure 14 may or may not include an apex vent.

[0020] Referring now to Fig. 6, a support panel such as support

panel 94 is formed by a first leg 96 and a second leg 98, each leg extends from bottom 100 to top 102. First leg 96 and a second leg 98 are generally parallel. One or more lateral supports 104 extend from and connect first leg 96 to second leg 98. One or more support web such as support webs 106 and 108 may also be secured between first leg 96 and second leg 98. Support webs such as support webs 106 and 108 may include decorative elements such as support web 12' shown on Fig. 4, support web 12" shown on Fig. 5, or support webs 124' or 124" shown on Fig. 9, or any other suitable configuration.

[0021] Referring now to Fig. 7, two or more support panels such as support panel 110 and support panel 112 may be joined or connected along leg edge 114 between support panel 110 first leg 110' and support panel 112 first leg 112'. Angle 116 between support panel 110 and support panel 112 may be any suitable angle and is preferred to be between 90 and 130 degrees. In a currently preferred embodiment of the present invention, angle 116 is 90 degrees. In an alternate embodiment of the present disclosure support panel 110 and support panel 112 may be fabricated to share a common leg

[0022] One or more service shelves such as service shelf 118 may be secured or otherwise joined between support panel 110 and support panel 112. Service shelf 118 may connect to lateral supports such as lateral supports 104'and 104", or between support webs such as support web 106' and support web 106". Service shelves such as service shelf 13 shown in Fig. 2 and service shelf 120 shown in Fig. 11 illustrate how service shelves may be incorporated in different embodiments of the present disclosure.

[0023] Referring now to Fig. 8 and Fig 9, in another embodiment of the present disclosure, Barzebo 122 includes 2 support panels such as support panels 124 and 124' and two service support panels such as service support panels 126 and 126'. As disclosed above, within the horizontal plane of Fig. 8, Barzebo envelope 132 is

formed by service unit support panels 126 and 126′ in corners 128 and 128′ respectively, and support panels 124 and 124′ in corners 130 and 130′ respectively. Barzebo envelope 132 extends vertically from the ground to roof structure 134, enclosing Barzebo volume 136. Optimal benefit area 138 is a 3-dimensional space formed within Barzebo envelope 136, and is generally equidistant from barzebo envelope 132.

[0024] Service unit 140 includes server area 140S and patron area 140P. Patron area 140P is adjacent service unit side 142. In Barzebo 122 according to the present disclosure, patron area 140P and optimal benefit area 138 have an area of congruence identified in Fig. 8 and Fig. 9 as Barzebo area 150.

[0025] Service unit 140 is an integral structural element of Barzebo 122. Service unit 140 supports service unit support panels 126 and 126′ at bar corners 128 and 34 respectively. Support panels 126 and 126′ are attached to service unit 140 at attachment points such as attachment point 144. Service unit legs 146, 146′, and 148 extend from the ground to roof structure 134. Integration of service unit 140 with service unit support panel 126′ extends the lateral support along axis X at bar corner 128′ from width 152 of a support panel leg to length 154. Integration of service unit 140 with service unit support panel 126 extends the lateral support along axis X at bar corner 128 from length 156 of a support panel such as support panel 126 to length 154. Integration of service unit 18 with service unit support panels 126 and 126′ extends the lateral support along axis Y at bar corners 128 and 128′ from length 158 of a support panel such as support panel 126′ to length 160.

[0026] Referring now to Fig. 10, in another embodiment of the present disclosure Barzebo 162 includes support panels 164, 164′, 166 and 166′ that are turned at an angle 170 from the X axis and the Y axis. In a currently preferred embodiment of the present disclosure, angle 170 is 45 degrees, other suitable angles or

combinations of angles may be used. The width of support panels may be varied and with the orientation of the support panels, support panels such as support panel 166' may extend beyond Barzebo envelope 172 as shown. Support panels such as support panel 164 may have any suitable width between and including width 174 to width 176.

[0027] Referring now to Fig. 11, in still another embodiment of the present disclosure Barzebo 180 includes compound support columns 182, 184, 186, and 188. Each compound support column includes 3 or more support panels such as compound support column 182 including support panels 182', 182", and 182"'. Each support panel may be configured as discussed above.

[0028] Referring now to Fig. 12, in another further embodiment of the present disclosure Barzebo 190 is octagonal with 8 support columns such as support column 192. In this embodiment Barzebo envelope 194 is defined by the support columns and the roof structure. Optimal benefit area 196 is again equidistant from Barzebo envelope 194 and separation distance 198 is determined by the latitude and the environment. The congruence of optimal benefit area 196 and patron area 199 defines Barzebo area 200.

[0029] Having now described the invention in accordance with the requirements of the patent statutes, those skilled in this art will understand how to make changes and modifications in the present invention to meet their specific requirements or conditions. Such changes and modifications may be made without departing from the scope and spirit of the invention as set forth in the following claims.